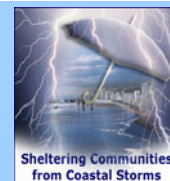


# PESTICIDE FACT SHEET

## ST. JOHNS RIVER



THE COASTAL STORMS INITIATIVE

ATRAZINE

## ATRAZINE

### What is a Pesticide?

The Environmental Protection Agency defines a pesticide as any substance or mixture of substances intended for preventing, destroying, repelling, or migrating any pest. This does not refer just to insect pests but to plants, fungi, microorganisms such as bacteria and viruses as well as mice and other animals. Many household products that people commonly use from flea and tick sprays to kitchen disinfectants to swimming pool chemicals are considered pesticides.

### What Kind of Pesticide is Atrazine?

Atrazine is an herbicide commonly used in the control of broadleaf and grassy weeds. Other facts about atrazine are listed below.

- It is the most heavily used pesticide in the United States.
- Atrazine frequently contaminates both surface and ground water.
- It is highly mobile during storms.
- Atrazine takes a long time to break down.
- It disrupts primary productivity (algae) and aquatic insects.
- Atrazine can cause secondary effects on fish and shellfish.

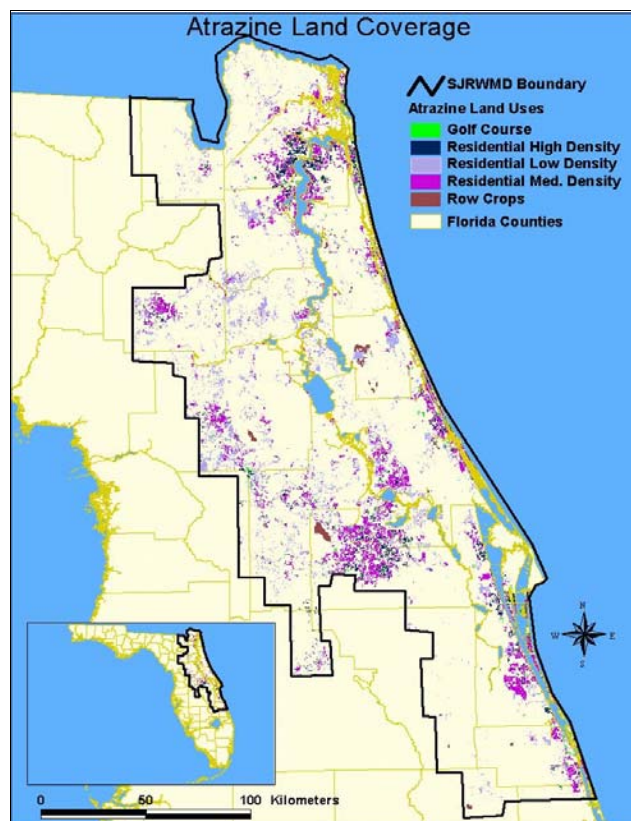
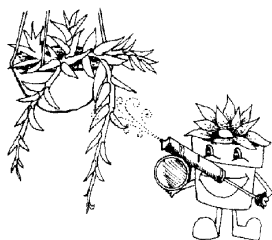


Figure 1 - Land Coverage of Potential Atrazine Use

### Where is Atrazine Used in the SJRWMD?

- Atrazine can be used on 952,268 acres (3,854 km<sup>2</sup>) of land in the SJRWMD.
- Atrazine is used in the SJRWMD on land that include golf courses, residential lawns, other turf areas, and corn crops (Figure 1).
- Areas within the SJRWMD that may be at particular risk from atrazine contamination after a storm are:

Jacksonville Portion of St. Johns River  
Dead Lake and Crescent Lake Area  
Lake Monroe

## Why Should I Care?

The presence of high levels of atrazine in ground and surface water can lead to harmful effects in the surrounding ecosystem. The algae and aquatic insects that are harmed by atrazine serve as the food for larger organisms such as shellfish and fish. If their food is gone, they too may die. If humans ingest atrazine it can cause congestion of heart, lungs and kidneys; low blood pressure; muscle spasms; weight loss; and damage to adrenal glands. Long-term effects could include weight loss, cardiovascular damage, retinal and some muscle degeneration; and cancer<sup>1</sup>.

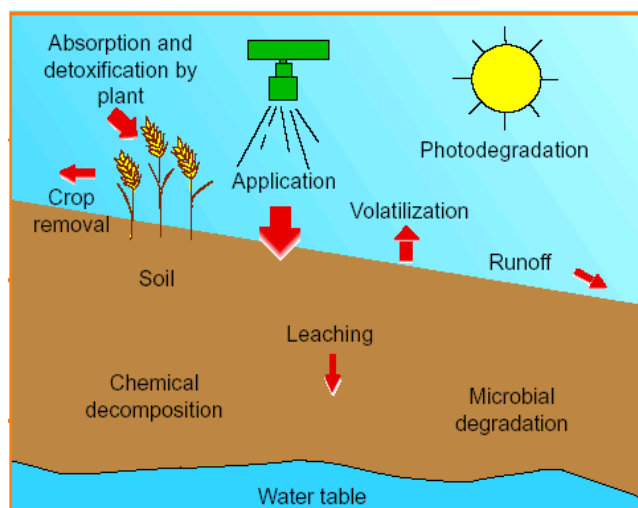


Figure ?? - Caption Here<sup>2</sup>

## What Can I Do to Help?

Anytime you use pesticides, there are things you can do to minimize the harmful effects the pesticide may have on your household and the environment around you.

- Only use a product for its intended purpose. Just because it eliminated one pest does not mean it will

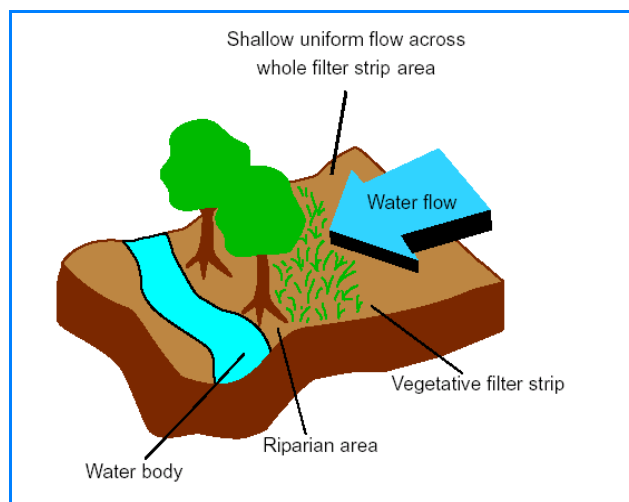


Figure ?? - Caption Here<sup>2</sup>

- remove another.
- Always use the amount recommended on the label. More does not mean better.
- Manufacturer labels advise users not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are well-drained. Your local agriculture agencies can provide further information on the type of soil in your area and the location of ground water.
- Atrazine should not be mixed, loaded, or used within 50 feet of wells, including abandoned wells, drainage wells, and sink holes.
- Atrazine may not be applied aerially within 200 feet of natural or impounded lakes and reservoirs.
- Do not apply the pesticide before a predicted rain storm. The rain washes the chemicals into nearby creeks and rivers.
- You can further protect aquatic areas by maintaining vegetative cover between the water source and your application site.

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- Liberty ATZ (Agrevo USA Company)
- Lumax (Syngenta Crop Protection Inc)

## Atrazine Products

**A**trazine is a common ingredient in many “weed and feed” products. Some of the products in which you can find atrazine are listed below. The names in parenthesis indicate the manufacturers of the product.

- Aatrex 4L (Syngenta)
- Aatrex Nine-O (Syngenta)
- Atra-5 (Drexel)
- Atratol (CIBA-GEIGY Corp.)
- Atrazine 0.92% 20-0-20 (Lescro)
- Atrazine 4L (UHS, Agrilience, Helena, UAP, Universal Cooperatives)
- Atrazine 90 DF (Agrilience)
- Atrazine 90 (Universal Cooperatives)
- Atrazine 90 WDG Sothern Turf (UHS)
- Atrazine 90DF (Drexel)
- Basis Gold (El Dupont de Nemours & Co Inc)
- Bicep II Magnum (Novartis Crop Protection, Inc.)
- BioTram 495 (Sostram Corp.)
- Bonus S (The Scotts Company)
- Buctril + Atrazine (Aventis Cropscience USA LP)
- Bromazine (Wilfarm)
- Bromox + Atrazine (Micro Flo Company LLC)
- Bullet (Monsanto Company)
- Channel Xtra (Monsanto Company)
- Contour (American Cyanamid Co/BASF)
- Degree Extra (Monsanto Company)
- Dupont Cinch ATZ (El Dupont de Nemours & Co Inc)
- Fieldmaster (Monsanto Company)
- Fultime (Dow Agrosciences LLC)
- G-MAX Lite (BASF)
- Guardsman (BASF)
- Gesaprim (Syngenta)
- Harness Xtra (Monsanto Company)
- Keystone (Dow Agrosciences LLC)
- Laddok S-12 (BASF)
- Lariat (Monsanto Company)
- Leadoff (El Dupont de Nemours & Co Inc)

- Marksman (BASF)
- Moxy + Atrazine (Terra International Inc)
- Ready Master ATZ (Monsanto Company)
- Shotgun Flowable (Platte Chemical Company)
- Sterling Plus (Agrilience LLC)
- Strike St. Augustine Weed and Feed 25-2-5 (Gro Tech, Inc.)
- Surpass 100 (Dow Agrosiences LLC)
- Volley ATZ Lite (Tenkoz Inc)

## Atrazine Links

This is a list links that lead to additional information about atrazine or the water management district itself.

### Pesticide Information

[www.epa.gov/pesticides/about/](http://www.epa.gov/pesticides/about/)

### Atrazine Information

[www.beyondpesticides.org](http://www.beyondpesticides.org)

[www.scorecard.org/chemical-profiles](http://www.scorecard.org/chemical-profiles)

[www.speclab.com/compound/c1912249.htm](http://www.speclab.com/compound/c1912249.htm)

### District Information

[www.sjrwmd.org](http://www.sjrwmd.org)

## Bibliography

<sup>1</sup> Nevada Source Water Protection, 2003. Bureau of Health Protection Services, 1179 Fairview Drive, Carson City, NV 89701-5405. <http://www.unce.unr.edu/swp/default.html>

<sup>2</sup> Devlin, D.L., D.L. Regehr, and P.L. Barnes, 2000. "Managing to Minimize Atrazine Runoff." Kansas State University Agricultural Experiment Station and Cooperative Extension Service. <http://www.oznet.ksu.edu/library/crpsl2/mf2208.pdf>